REMARKS

Claims 1-3 and 8-10 and 21 stand cancelled, whereas claims 4-7 and 11-20 remain pending, with claims 4-7 and 11-14 now withdrawn. Pending claims 15-20 stand rejected. In an effort to better point out and claim their invention, applicants have amended claim 15. Ample antecedent basis exists in the specification for such amendments.

Before proceeding to address the rejections, applicants will briefly summarize their invention to assist the examiner in better understanding the differences between applicants' invention and the art of record. As recited in newly submitted claim 15 applicants simulate **bit accurate** film grain in an image block by a method that commences with the step of computing the average of the pixel values within the image block. Thereafter, applicants randomly select, **as a function of the average value of the image block**, a block of bit accurate film grain from among a pool of previously established locks of bit accurate film grain. The term "bit accurate describes refers to simulated film grain that has repeatability, typically due to the use of integer transforms. In other, for the same values, the simulation process yields the same film grain values.

35 U.S.C. §101 Rejection of Claims 15, 17, and 18

Claims 15, 17, and 18 stand rejected under 35 U.S.C. §101 as failing to recite statutory subject matter. In this regard, the examiner contends that the claims fail to pass the machine or transformation test.

Recently, the USPTO issued guidelines concerning subject matter eligibility, entitled "Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bikski v. Kappos*, dated July 27, 2010. (http://www.uspto.gov/patents/law/exam/bilski_guidance_27jul2010.pdf).. Under these guidelines, the so-called "machine or transformation" test applied by the examiner no longer constitutes the **exclusive** criterion for establishing subject matter eligibility under 35 U.S.C. §101. However, the machine or transformation test nonetheless remains a useful investigative tool.

To assure that their claims recite statutory subject matter, applicants have amended claim 15 to recite that their method is practiced in connection with an apparatus for generating film grain. Thus, applicants' amended claim 15, and claims 17 and 18 that depend therefrom,

now recite a machine, thereby satisfying the "machine or transformation" safe harbor established by the PTO guidelines. In view of the amendment to claim 15, applicants request withdrawal of the 35 U.S.C. §101 rejection of claims 15, 17, and 18.

35 U.S.C. § 103(a) Rejection of Claims 15-20

Claims 15-20 stand rejected under 35 U.S.C. § 103(a) as obvious over US Patent 5,641,596 to Robert T. Gray et al (hereinafter, "Gray et al."), in view of US patent 4,930,023 to Kazunori Yakame (hereinafter, "Yakame"). In rejecting applicants' claims, the examiner contends that Gray et al. discloses a method for simulating film grain, but do not teach randomly selecting blocks of film grain as a function of the average value of the block. To supply this missing teaching, the examiner relies on Yakame to teach random selection of film grain blacks conditioned on the average value of the image block. Applicants respectfully traverse this rejection for the reasons given below.

The Gray et al. patent describes a technique for adjusting film grain in an image by first stripping the existing film grain from the image and then adding synthesized grain. As the examiner has correctly noted, Gray says nothing about random selection of film grain blocks, let alone random selection conditioned on the average value of the image block.

The Yakame patent discloses a mechanism for randomly accessing grained screen patterns for blending with an image. While Yakame et al. teaches random pattern selection, the patent does not teach applicants' feature of:

> randomly selecting, *as a function of the average value of the image block* (emphasis added), a block of bit accurate film grain from among a pool of previously established blocks of bit accurate film grain

Yakame says nothing about conditioning the random selection as a function of the average value of the image block. Notwithstanding the examiner's assertion to the contrary, the disclosure in the Abstract , FIG. 7 as well as Col. 4, lines 34-51 of the Yakame patent all fail to provide any support for conditioning the random selection as a function of the average value of the image block as recited in applicants' claims.

With regard to random selection, the Abstract of Yakame states the following:

> The grained screen patterns are accessed at random in response to an address signal (AGP) generated in a random number generator.

Nothing in this cited portion of Yakame says anything about conditioning the random selection as a function of the average value of the image block as recited in applicants' claims

With regard to the disclosure at Col. 4, lines 34-51 of Yakame, applicants direct the examiner's attention to the statement at lines 47-51 which provides:

> The process being conducted in the image scan recorder 400 shown in FIG. 2 will be now described. This process includes a step of converting a pulse generated by scanning into an address signal and a step of randomly assigning a grained pattern GP to each unit cell UC in response to the address signal.

Again, this cited portion of Yakame only refers to random selection, not random selection conditioned on the average value of the image block as recited in applicants' claims

FIG 7 of Yakame shows a numerical distribution of density threshold patterns. Nothing in FIG. 7 suggests random selection, let alone conditioning the random selection as a function of the average value of the image block.

In summary, neither the Gray et al. nor Yakame patents teach applicants' feature of random film block selection conditioned on a function of the average value of the image block. Therefore, the combination of Gray et al. and Yakame do not teach all of the features of applicants' claims. Applicants request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 15-20 for this reason.

Applicants maintain that the combination of Gray et al. and Yakame do not teach all of the features of applicants' claims for another reason. Applicants' independent claims 15 and 19 both recite the feature of simulating **bit-accurate** film grain. As discussed above, **bit-accurate** film simulation yields results that that have repeatability, due to the use of integer transforms. Neither Gray et al. or Yakame teach the desirability of generating **bit-accurate** film grain. Therefore the combination of Gray et al. and Yakame do not teach all of the features of applicants' claims. Applicants request withdrawal of the 35 U.S.C. § 103(a) rejection of claims 15-20 for this reason as well.

With regard to the failure of the examiner to show all the features of applicants' claims, applicants note the following admonition in Section 2141 of the MPEP which provides:

> The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR* noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Court quoting *In re Kahn,* 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006), stated that "'[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some

articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.'" *KSR*, 550 U.S. at ___, 82 USPQ2d at 1396.

Given the absence of any disclosure in either Gray et al. or Yakame with regard to   (a) random film block selection conditioned on a function of the average value of the image block; and (b) generating **bit-accurate** film grain, the examiner has not established a *prima facie* case of obviousness, warranting withdrawal of the 35 U.S.C. § 103(a) rejection of the claims.

Conclusion

In view of the foregoing, applicants solicit entry of this amendment and allowance of the claims. If the Examiner cannot take such action, the Examiner should contact the applicant's attorney at (609) 734-6820 to arrange a mutually convenient date and time for a telephonic interview.

No fees are believed due with regard to this Amendment. Please charge any fee or credit any overpayment to Deposit Account No. **07-0832.**

Respectfully submitted,
Jill MacDonald Boyce et al.

By: /Robert B. Levy/_____
        Robert B. Levy
        Attorney for Applicants
        Reg. No. 28,234
        Phone (609) 734-6820

Patent Operations
Thomson Licensing LLC
P.O. Box 5312
Princeton, New Jersey 08543-5312
August 9, 2011